

Appln. No. 10/655,695
Amdt. dated April 12, 2007
Response to Office Action Mailed October 20, 2006

PATENT

REMARKS/ARGUMENTS

Claims 1-20 remain pending in this application and stand rejected. Claims 11-20 are amended to recite, in part, "A computer-readable medium encoded with a computer program, the computer program comprising a set of instructions... wherein the set of instructions when executed by a computer cause the computer to..." The amendments to claims 11-20 are believed to overcome the rejection under 35 U.S.C. 101. Claims 1-2 are amended to dispense with the term "relevant". Claims 1-6 are also amended to provide an antecedent basis for the limitation "second waveforms". Withdrawal of the rejections under the second paragraph of 35 U.S.C. 112 is respectfully requested.

Claims 1, 2, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pramanick et al. (US 2004/0216005, hereinafter Pramanick) in view of Alexander (US 200/0030683, herein after Alexander) and further in view of Tojima et al. (US 6,898,771, herein after Tojima). Applicants respectfully traverse these rejections for the following reasons.

As pointed out by the Examiner, Pramanick fails to disclose "displaying pointers to the time points of interest". Since Pramanick does not disclose "displaying pointers to the time points of interest" Pramanick also fails to disclose "receiving edits to the time points of interest in response to a user moving the pointers on the interactive graphical user interface", as recited, in part in claim 1. Accordingly, Pramanick also fails to disclose "updating timing parameters based on the edits to the time points of interest", as recited, in part, in claim 1 and as described throughout the original disclosure of the present application.

In accordance with Claim 1, updating of the parameters are based on edits to the time points of interests caused by a user moving the pointers on the interactive graphical interface. For example, referring to Figures 5 of the original disclosure, it is stated that:

"As another example, a user can move arrow 402 that points to the Destination multi-cycle edge of the Destination Clock signal. In the example of FIG. 5, the user has dragged arrow 402 to the left to the previously occurring falling edge of the Destination Clock.

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After the user moves an arrow in the graphical user interface window, the present invention automatically updates the value for the changed timing parameter and sends the updated timing parameter to the EDA tool. The EDA tool then generates new timing data by simulating the circuit design using the updated value provided by the user. The new timing data can be used to update information displayed in interface 500 (or other output data of the EDA tool).

For example, if the user moves arrows 401 or 402 as shown in FIG. 5, the value for the destination multi-cycle is automatically updated from 2 to 1. The destination multi-cycle value is now 1, because the user has indicated that destination latch captures the incoming value on the first falling edge of Destination Clock at the register following the launch edge." (pp. 13, lines 9-21)

Furthermore, as a result of a user moving a pointer to indicate a change in the destination multi-cycle value, the other arrow is automatically moved to correspond to the change made by the user:

"The user can move arrow 401 or 402 to indicate a change in the destination multi-cycle value. The present invention can automatically move the other arrow to correspond to the change made by the user." (pp. 13, lines 22-24)

Alexander appears directed at a methodology for annotating measurement waveforms in a signal measurement system. As best understood, the annotations are merely comments, are not used to edit the time points of interest, and are not used to update the timing parameters based on the edits. Claim 1 is thus allowable over Alexander, whether taken alone or in combination with Pamanick for reciting, in part, "displaying pointers to the time points of interest on the first and second waveforms; receiving edits to the time points of interest in response to a user moving the pointers on the interactive graphical user interface; and updating timing parameters based on the edits to the time points of interest", which Alexander fails to teach or suggest..

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Tojima is cited as disclosing "a system and a method of designing a semiconductor integrated circuit device where a user is able to modify timing diagrams and the system will automatically generate the necessary logic between or within circuit blocks to implement the change in the circuit behavior" (column 2, lines 16-40). The Examiner further states:

"Tojima also offers Figure 13A, which is a timing chart illustrating a method of modifying a signal waveform. Figure 13A illustrates that signal B can be delayed two clock cycles if a user clicks and drags the waveform, or signal B can be inverted, if a user double-clicks on a waveform. This change in the timing diagram is translated into a functional element, such as a flip-flop or an inverter, and the change is made in hardware to reflect the change in the timing diagram. (column 18, lines 20-67 and column 19 lines 1-40)."

Tojima fails to teach or suggest claim 1, either alone, or in combination with Pramanick and Alexander, for a number of reasons. Tojima fails to teach "displaying pointers to the time points of interest on the first and second waveforms" as recited in claim 1. Tojima fails to receive "edits to the time points of interest in response to a user moving the pointers on the interactive graphical user interface". In contrast, to effect a change, Tojima requires that the user click and drag the waveform. Tojima fails to disclose "moving the pointers" in order to cause an edit to "the time points of interest". Tojima also fails to disclose "updating timing parameters based on the edits to the time points". Accordingly, Pramanick whether taken alone or in combination with Alexander and/or Tojima, fail to teach or suggest "displaying pointers to the time points of interest on the first and second waveforms; receiving edits to the time points of interest in response to a user moving the pointers on the interactive graphical user interface; and updating timing parameters based on the edits to the time points of interest."

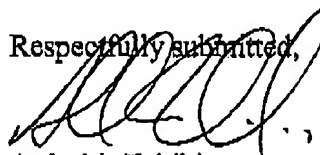
Claim 1 and its dependent claims 2-10 are thus allowable over Pramanick, in view of Alexander and further in view of Tojima. Claims 11 and its dependent claims 12-20 are allowable for at least the same reasons as is claim 1.

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In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 752-2424.

Respectfully submitted,



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